



University of
Massachusetts
Amherst

Time to put your marketing cap on: Mapping digital corporate media curriculum in the age of surveillance capitalism

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Abstract (<100 words)

Critical media literacy scholars have long argued, and documented, the ways in which corporate media literacy seeks to produce media consumers rather than more responsible media users. However, until this study, critical scholars have not performed a broad analysis of 21st century digital corporate media literacy content. Given educational institutions' renewed interest in media literacy education, and transition to distance education during the COVID-19 pandemic, it is crucial, especially for teachers, to determine whether critical media literacy scholars' assessment of corporate-funded media literacy content has merit in digital spaces. As a result, this study employs a critical lens to curriculum map the lesson plans and curricula from nine companies' (Apple, Facebook, Google, Nearpod, Intel, Microsoft, Twitter, Samsung, and Verizon Wireless) corporate media literacy content. The findings, which reveal the ideology behind the corporate contents' values and learning outcomes, have important implications for media scholars and practitioners.

Introduction

In the 1980s, in an effort to increase brand awareness and sales, the Campbell's Soup Company engaged in at least two sponsored projects that brought their product in front of school children. They sponsored the Prego Thickness Experiment, whose packaging included a slotted spoon and a Prego poster, to use scientific methods to 'prove' that this sauce was thicker than that of their competitor, Ragu (Molnar, 1996; Stead, 1997). Campbell's also sponsored 'Labels for Education' where, in exchange for submitting labels from Campbell's soup cans, schools would receive a filmstrip on Abraham Lincoln (5,125 labels), a remote control projector to show the film (25,125 labels), and a screen on which to watch it (31,875 labels) (Molnar, 1996).

These two projects are indicative of a much larger trend of corporate content entering the classroom (Druick, 2016). For example, in the 1920s, Ivory Soap and their competitor Palmolive sponsored classroom activities (Harty, 1979; Stead, 1997) as a way to get their brands to consumers. By the middle of the 20th century, corporate-friendly foundations such as Rockefeller and Ford moved beyond such seemingly harmless activities to the design of media education content (Druick, 2016). These practices increased in the 1980s, when educational marketing firms began working with clients to develop curriculum and lesson plans to highlight their clients' products. Notable examples include General Mills, Nike, Lego, Gatorade, Gushers candy, Planters, Pizza Hut, the Potato Board, and Tootsie Roll (Harty, 1979; Molnar, 1996, 2005; Stead, 1997). These campaigns led to the development of branded covers for textbooks (Stead, 1997), school hallways emblazoned with billboards, and advertising-laden and corporate-sponsored classroom materials (Consumers Union, 1998a). For example, the 1980s prog-rock band Rush, in partnership with their record label Polygram Records and the educational marketing firm Lifetime Learning Systems, Inc., released a lyrical analysis activity that included a promotional Rush poster, drawing from the songs on their 1985 album, *Power Windows* that encouraged students to buy the album (on their own) and bring it to class for further listening (Polygram Records, 1986). The most controversial was Whittle corporation's Channel One,

¹ The authors would like to thank Jennie Nelson and Ella Sprick for their tireless research assistance, especially in locating curricula and testing it out and Jeff Share and Ben Boyington commentary and support on early drafts.

which provided funding for schools in exchange for classrooms showing a daily 12-minute news program for students featuring content such as the same Pepsi advertisement shown on MTV (Consumers Union, 1998a). The perceived need for computers in late 20th-century schools saw companies such as Apple produce educator content (Molnar, 1996). In the 21st century, the growing demand for media literacy education saw Apple joined by Google, Facebook, Microsoft, and other big-tech corporations in the construction of ‘free’ media literacy lessons for schools.

Since corporate advertising entered the classroom, some Americans have been concerned with the dangerous influence posed by media use. Most recently, these concerns have centered on screen addiction, the legitimization of false information, cyber-bullying, security issues, privacy, dangers to user health, drug and alcohol addiction, defamation, scams, and fraud (boyd, 2012; Jain, 2016). Concerns about the dangerous effects of media have been heightened by fears about the influential role of fake news on elections and, most recently, America’s response to the COVID-19 crisis (Gambuto, 2020; Higdon, 2020; Mull 2020). In response, scholars have argued that media literacy can mitigate the pernicious influences of media while maintaining access to media affordances (Potter, 2010). Starting in 1993, scholars in the United States have largely defined media literacy as “the ability to access, analyze, evaluate, create, and act using all forms of communication” (Aufderheide, 1993, p.6). Unlike schools in the United Kingdom, Europe, and Asia, which began offering media literacy to their students decades ago (Buckingham, 1998; Cheung, 2009; Hobbs & Frost, 2003), the addition of media literacy to U.S. classrooms has been hindered by numerous factors, including a lack of visibility (Hobbs, 2016), available teacher education (Butler, 2020), and funding (Heins & Cho, 2002).

Funding has proved to be one of the most controversial factors among scholars seeking to advance media literacy education. Some media literacy scholars argue that corporations have been strong allies that have played a necessary role in advancing media literacy (Bulger & Davidson, 2018; Heins & Cho, 2002). For example, in an interview with Jolls (2011), media literacy scholar Renee Hobbs tells the story of working with teachers in a Massachusetts school to teach them about Channel One and how it and mainstream news broadcasting services work. Similarly, The National Association for Media Literacy Education (NAMLE), one of the biggest sources of media literacy content in the United States, takes funding from companies like Nickelodeon, Google, Facebook, and Twitter (NAMLE, 2019). Critical media literacy (CML) scholars argue that the acceptance of corporate funding results in an approach to media literacy education that disregards critical thinking (Jhally & Earp, 2003; Kellner & Share, 2005; Yousman, 2016). In fact, scholars have found differences in how critical and acritical scholars approach media literacy in terms of content, learning tools, learning outcomes, and assessment tools and procedures (Higdon, Butler, & Swerzenski, 2021).

Critical scholars contend that the differing approaches result from the ideology that shapes corporate media literacy content (Kellner & Share, 2007). As economist Thomas Piketty (2020) explains, ideology “refers to a set of a priority plausible ideas and discourses describing how society should be structured” (p.3). Neoliberalism, a dominant ideology in the U.S., privileges freedom as the overarching social value that is achieved when a society protects the market from government intervention (Mirowski & Plehwe, 2009). Adherents to neoliberalism interpret the innovations and profits of the tech-industry as essential for a free and prosperous society (Reynolds & Szerszynski, 2012). Furthermore, they argue that historic inequalities will not be remedied by government, but by competition. Indeed, rather than focus on addressing historic inequities through the targeted dismantling of power structures, neoliberalism advocates

for meritocratic systems that allow the best, regardless of their identity, to succeed (Littler, 2013). Their treatment of identity, which some refer to as color-blindness, is “a perspective that does not acknowledge the power or presence of race or racialized differences in opportunity structures”(Nasir, et al., 2016, p.354).

CML scholars contend that critical theory rather than ideology should shape pedagogy (Kellner & Share, 2007). Theory tends to focus on issues that are smaller in scope as compared to ideology because theories exist to rigorously test empirical evidence. Ideology on the other hand voids tests because it is fixed and absolute, offering a much more circular logic or rigid stance that often expresses contradictions. Critical scholars have found rigid corporate ideologies integrated into corporate media literacy content. (Druick, 2016; Harty, 1979; Molnar, 1996, 2005; Stead, 1997). However, critical scholars have yet to apply this analysis to 21st century digital corporate media literacy content.

Given educational institutions’ renewed interest in media literacy education, and the demands for distance digitized education during the COVID-19 pandemic, it is crucial, especially for teachers, to determine whether CML scholars’ assessment of corporate-funded media literacy content has merit for 21st century digital media literacy content. In the midst of the COVID-19 pandemic, teachers find themselves pressured to adopt and utilize digital content in their pedagogy. More often than not, such materials are, at least initially, sent to educators without solicitation. There is a long history of corporations using disruptive events - such as COVID-19 - to rebrand themselves as bastions of effective educational solutions in moments of crisis (Molnar, 1996; Stead, 1997). Such events and subsequent corporate behavior leave teachers in a precarious position, where schools demand that they adopt and implement digital content into their pedagogy, while corporate advertisements promise to deliver the most effective content for digital spaces. Given the equity implications, and importance of effective educational outcomes on learners’ lives, it is crucial that we investigate the pedagogical value and influence of digital education content.

This study analyzes digital corporate media literacy content. We reviewed the various lesson plans and, along with our two research assistants, when possible, ‘enrolled’ in various online media courses. We had three goals: (1) to determine what, exactly, digital corporate media literacy is teaching children and young people, (2) to see if there is merit in bringing these ‘free’ lessons to classrooms, and (3) to investigate what benefits, if any, these curricula may have for teachers and classrooms.

Literature Review

Scholars have noted that corporations brand their educator content as a solution to budget shortfalls and funding struggles in public schools (Stead, 1997). Harty’s (1979) *Hucksters in the classroom: A Review of industry propaganda in schools* was the first text to tackle the presence and influence of corporations on classroom learning. Harty (1979) identifies a practice that continues into the present (Druick, 2016; Molnar, 1996, 2005): Corporations present themselves as saviors for teachers, classrooms, and schools facing resource or funding shortages. From a marketing standpoint, corporations see classrooms as an opportunity to get their products in front of a young, captive, and presumably new audience. The face of corporate benevolence masks the rich opportunity for them to ply their goods and test new products in an effort to build both brand awareness and brand loyalty. According to Molnar’s (1996) detailed analyses, the provided lessons usually had nothing to do with the curriculum, so “companies frequently bill their creations as ‘supplements’ to the teachers’ regular lesson” (p.28). This approach has been used

since early in the 20th century by a litany of corporations with various motivations and desired outcomes.

Scholars have found three motivations for corporations to produce educator content. First, corporations can dramatically improve their public image in the face of crises or bad press, effectively putting the burden on students to see them as ‘good citizens’ (Molnar, 1996). When corporations have negative public images, the development of curriculum can assuage the public’s perception. Molnar (1996) details work from the Plastic Bag Association countering the dangers of single-use bags; The American Forest Foundation touting the benefit of deforestation; the Exxon corporation’s efforts to save wildlife after the *Valdez* oil spill; Proctor & Gamble’s construction of environmental education lessons; and the American Egg Board’s counter to the claims about the negative health impact of ‘bad’ cholesterol. While what is included *in* the lessons is problematic as it serves as blatant advertising, what is *left out* might be even more serious. For example, General Motors sponsored lessons on the environment which detailed all the work that individuals could do to combat global warming (the language of the early 1990s) with no mention of corporate or executive responsibility. Likewise, McDonald’s *Nutrition Action Pack*, sought to repair its unhealthy image by arguing that ice cream can be eaten with cereal, as long as it is balanced out in the day’s meal plan (Harty, 1979). In attempting to save their public image, these corporations effectively put the responsibility of both forgiveness and change-making on children.

Second, corporations have a vested interest in making sure anti-corporate or even corporate-neutral messages are not part of the classroom environment. Nader (2000) details one example of push-back against a curriculum that was determined to be harmful to corporations. In 1975, the Center for the Study of Responsive Law and Random House publishers built a curriculum entitled *To Buy or Not to Buy*, which was designed to teach “basic consumer skills including how to shop astutely and how to pursue complaints” (Nader, 2000, p.321). All 1000 copies were sold, but the publisher did not pursue a second edition. In his analysis, Nader (2000) asserts that this happened for three reasons, “(1) teachers could not fit the materials – a filmstrip, readings on various consumer issues, and fifty activity cards considering various aspects of purchasing decisions- into the established curriculum; (2) often teachers themselves did not know enough to teach the unit; and (3) schools were receiving complaints from the business community. Corporate influence, therefore, contributed in this case to self-censorship” (p.321).

Third, companies can begin the process of recruiting the next generation of laborers by contributing to their education (Harty, 1979; Molnar, 1996). Although corporations were present in the classroom well before the 1980s, one major theme in the late 20th-century relationship was the perceived need for classrooms to do more work to train a functional workforce. This concern was sparked by the 1983 release of *A Nation at Risk* by the U.S. National Commission on Excellence in Education, which claimed that because of lax policies in K-12 education, America’s youth would not adequately progress towards productive, long-term employment. This sparked the interest of corporate America and “nearly every Fortune 500 company [had] a school project” (Stead, 1997, nytimes.com) as a way to shore up their future labor force. With a particular eye towards technology, it was easy to see the long-term relationship forming: Tech companies would provide hardware, guaranteeing that their software needed to be purchased and that their labor would be contracted for inevitable repairs and/or upgrades, and, through student work, could identify potential future employees (Molnar, 1996, 2005). Molnar (1996) notes, however, that by the mid-1990s, there was “no evidence of a labor shortage” and this fear was, in fact, a manufactured crisis (p.6). And still, today’s Common Core State Standards argue for

education to prepare students for the workforce and college, barely a mention of citizenship and democracy (Wheatley, 2018).

In the 21st century, there has been an explosion of corporate digital education content from tech giants such as Apple, Facebook, and Google. The latter, for example, built a media literacy curriculum in 2018 focusing on safe internet use and digital citizenship, then updated it in 2019 to include more information on spotting fake news and false content (Perez, 2019; Singer & Maheshwari, 2018). To create the curriculum, Google consulted with the executive director of the Net Safety Collaborative, a non-profit organization supporting schools' relationships with social media, and Faith Rogow, a US media literacy scholar and co-founder of the National Association for Media Literacy Education (NAMLE) (Perez, 2019). While Perez (2019) details what the curriculum covers, Singer & Maheshwari (2018) observe what is missing: No discussion of the role Google plays in collecting user information, tracking online action, and selling personal behavioral data. Furthermore, tech companies tout their nimble approach to curriculum development, promoting the benefits of personalized learning, where lessons can be created according to each student's needs (Cope & Kalantzis, 2016). They argue that this customization is a more effective alternative to traditional education. While personalized learning is presented as responsive, flexible, and with great potential for collaboration, concerns include "issues such as student privacy, the effects of profiling learners, the intensification of didactic pedagogies, test-driven teaching, and invasive teacher-accountability regimes" (Cope & Kalantzis, 2016, p.1).

However, unlike its 20th century antecedents, the scholarship analyzing 21st century digital corporate media education curricula is scant. One notable exception is Williamson's (2017) scathing analysis and critique of the marriage between digital code, algorithms, and political agendas currently infiltrating various school systems. Williamson (2017) argues that "much of education today is being influenced and shaped by the production of lines of code that make digital software function, and by the generation of digital data that allows information about education to be collected, calculated and communicated with software products" (p.6). While the history of corporate presence in the classroom is focused on data *gathering*, however rudimentary through the end of the 20th century, the key difference in the current iteration is that data *mining* is happening in real time (Williamson, 2017). This practice is part of a larger economic order known as surveillance capitalism. As Zuboff (2019) notes, surveillance capitalism seeks to commodify human behavior through artificial intelligence and machine learning technologies that collect and analyze data for the purpose of producing customized content and experiences that nudge and direct human behavior. Individual corporations under the larger umbrella of the tech industry are opening Silicon Valley schools, which are designed and implemented by former tech executives with no pedagogical experience, and which feature a streamlined, tech-heavy model and an emphasis on personalized learning. In such contexts, all facets of children's and young people's learning will be monitored, analyzed, and re-imagined through data mining practices. This is where major tech companies introduce and implement media literacy. Given the issues raised by Williams (2017) and the previous findings about 20th-century corporate content, it is crucial to determine whether the corporate content of the 21st century represents effective pedagogy or a continuation of corporate advertising in the classroom.

Methods

As critical media literacy scholars, the two authors of this piece have thus far avoided corporate media literacy work in their research and classroom applications, and, as such, were unfamiliar with the lessons available. With this project, we wanted to test our assumption that while a partnership with corporate media may make media literacy more mainstream and widespread, it will dilute the potential for critical analysis. With the adage against biting the hand that feeds in mind, we assumed that a corporate media-media literacy partnership would see most of the power, both in decision-making and in funding, in the hands of the corporation.

As critical media literacy scholars, we felt confident in our own knowledge of non-corporate media literacy lessons, but, beyond anecdotal knowledge, were less familiar with corporate media literacy lessons. In order to have the material be seen with fresh eyes, we asked one of our research assistants to take on the bulk of the initial search. Because there is no standard vocabulary under the umbrella of ‘media literacy,’ she began her search of media literacy lessons constructed and made available by major corporations by conducting searches using a variety of broad terms, such as “digital literacy,” “digital citizenship,” “corporate,” “non-corporate,” “media education,” “media literacy,” “curriculum,” and “K-12.” We started with an intentionally broad-ranging search in order to learn what, if any, curricula were being offered by corporations and how they named and presented their work. With the invaluable help of our research assistant, we organized the search results into three categories: Corporate media literacy lessons; popular press coverage of corporate media literacy lessons; and non-corporate media literacy lessons. We initially reviewed the non-corporate media lessons to see if there were any corporate connections; we are saving this data for another project. We applied the popular press coverage of corporate media literacy lessons to refine additional searches. The bulk of our data, which are the foundation for this piece, are drawn from the corporate media lessons.

For this piece, we focus on available corporate media literacy lessons, all of which are easily downloadable and free. *Forbes’ Top 100 Digital Companies’* list provided a baseline of corporate technology and media producers, and the company names listed therein were used as supplementary key terms in Google searches (for example, “Apple digital literacy” or “Apple media education”). We recognize the irony that in searching for corporate media literacy lesson plans, we employed the Google search function and acknowledge that our own personal algorithms most likely contribute to the order and primacy of search results. Because of this, after the initial search, we used different search engines, on different computers, and applied our research assistant’s word choices to our own searches to strive for repetition and redundancy.

This study is not an analysis of the corporations’ business models. Thus, we did not focus on brand loyalty, data mining, or their motivation for creating and implementing media literacy work. Those are crucial areas of study for future research, and we are especially curious to see if we can learn more about corporate interest in media literacy and if there is any pedagogical understanding of the work of media literacy education. Our research is focused upon what is and is not in the curricula and lesson plans that the corporations make available, whether they have contracted with others or developed the work themselves. When possible, we identified the funding sources for the curricula and lesson plan developments. Furthermore, the two authors and the research assistants downloaded and partook in various lesson plans to experience their content.

We analyzed lesson plans and curricula from the following nine companies: Apple, Facebook, Google, Nearpod, Intel, Microsoft, Twitter, Samsung, and Verizon Wireless. Three corporations’ curricula are built in partnership with non-profit organizations: Facebook partnered with the Youth and Media Project at the Berkman Klein Center of Harvard University; Microsoft

partnered with BBC Learning, BBC World Service, and actress Angelina Jolie’s philanthropic network; and Twitter partnered with UNESCO (The United Nations Educational, Cultural and Scientific Organization). Google consulted with educational specialists, including one media literacy scholar, on their curriculum. Some lessons, such as those from Intel and Verizon, are focused specifically on digital technology and how it applies to media awareness. Apple’s curriculum is the most seriously focused on classroom integration, making use of their available apps, which, if applied, will operationalize their hardware and software. Facebook, Google, Samsung, and Twitter focus on digital citizenship, online safety and security, and awareness of privacy. They provide detailed information on the age-appropriateness of various lessons and Facebook and Microsoft provide precise timing of how long the lessons will take. All the lessons are available for free, either online or via download. With the exception of the Apple products, which streamline the software and hardware, interested participants need not have accounts with the company.

There is an external reward system in place for completing many of the lessons, which may make it appealing for personal use. For both Microsoft and Google, participants are given a certificate for completing the different lessons. These certificates are personalized with the participant’s name and can be downloaded. For example, the research team participated in Google’s ‘Be Internet Kind’ lesson: A loosely disguised video game designed for young children where players toss a series of ‘nice’ emojis to sad characters and lock up bullies, as they ascend a mountain-like structure. On reaching the summit, the player is certified as ‘internet kind,’ evidenced through a personalized diploma-like document. The player must register for the game and provide some basic information, so it is assumed that this becomes part of Google’s data mining of users and, because the lesson is designed for children, gives them access to an otherwise protected group.

Findings

The corporate education content values and advocates for universal access to internet platforms and digital technologies. Each company reports that the learning outcomes of their content include marketable skills, expanding notions of citizenship, civil communication and collaboration, and protection from the dangers and threats posed by media use. In this way, these 21st-century technologies fall back on the tropes of the 20th-century corporate-classroom expectations: Preparation for the future labor force (Intel, 2020; Verizon, 2020), development of brand loyalty (Google, 2019), and a positive public image (Facebook, 2020; Twitter, 2020). Throughout the corporate education content, ambiguity surrounds many of the terms and key concepts, including ‘media literacy’ itself, which goes undefined. The corporate media education language is grounded less in educational theory and more in marketing and public relations, highlighting what is valuable about their curriculum and all but ignoring any potential critique. Furthermore, the corporate content offers an incomplete and sometimes contradictory view when it comes to issues related to privacy. Finally, users are largely discussed as a homogeneous group, with a few exceptions related to narrow definitions of diversity.

Finding 1: Developing Marketable Skills/Training A Workforce

The corporate content focuses on providing universal access, emphasizing marketable skills, and centralizing the introduction of technology to improve the classroom experience under the guise of improving education. Similar to the corporate presence in the 20th-century classroom, these companies indicate a seamless supplement to classroom requirements (Apple, 2020; Facebook,

2020; Intel, 2020; Nearpod, 2020; Verizon, 2020). Although the corporate content expresses desired learning outcomes, it is not clear why those outcomes are needed or if schools are not already achieving them.

It is clear that the goal is to provide students with universal access to digital tools and platforms. Verizon's content expresses the importance of universal access by noting that "digital inclusion is important for all" (Verizon, 2020). Verizon clearly stated their educational objective to "bring 5G technology to 100 schools" by 2021 (Verizon, 2020). When it comes to accessing the tools, most of the creators argue that it is both easy and engaging. Microsoft claims that its course is accessible to anyone with "basic reading skills who want to learn the fundamentals of using digital technologies" (Microsoft, 2020). Relatedly, Verizon warns that digital tools are so engaging that users may develop a "contagious curiosity" (Verizon, 2020). There is no exploration of whether universal access is a necessary or even positive development for users or for society.

The corporate content often cites the development of marketable skills as a desired learning outcome for students. For example, Nearpod lists the skills students attain from their educational content as computer vocabulary, the development of software applications, keyboarding, and data analysis (Nearpod, 2020). Intel provides a focused purpose for developing marketable skills, which is to prepare the next "generation of innovators" (Intel, 2020). Intel's lesson plan consists of various units that focus on the history of computing, coding, microprocessors, the Internet, and "electricity, electric circuits, and the difference between mechanical and nonmechanical (transistors) switches" (Intel, 2020). A final unit focuses on society and technology, stating the ways in which the advent of new technologies has been accompanied by rapid changes in human behavior. Their examples illustrate a technophilia that assumes access to digital tools will result in lucrative skills.

Without offering explanations of how or why, the curricula of all these companies indicate that there is a direct link between wealth and digital skills. Indeed, Microsoft argues that the development of marketable skills will "expand economic opportunity for everyone," arguing that "digital skills" are crucial for developing "a more promising future" for users (Microsoft, 2020). As a result, their content is designed to "help individuals gain the skills necessary to engage in a digital economy and improve livelihoods," and their curriculum makes this possible by teaching the user "the concept of the internet and how to access it using a web browser," how to "use search engines," how to communicate online, and how to "perform basic functions" such as interacting "with text, pictures, lists and other types of objects. You will also learn about working with and creating PDF files" (Microsoft, 2020). Microsoft is focused on the benefits students derive from their content, whereas Verizon and Apple are focused on transforming the schools. The corporate correlation between access to digital tools will engender economic opportunity is as well-supported as the claim wearing the right shoes will make you into a professional athlete. Apple and Verizon's content utilize paternalistic language to introduce their curriculum as a superior alternative to traditional education. For example, Verizon specifies that their content gives "students, teachers and administrators new paths to success with technology that provides richer learning experiences" (Verizon, 2020). Similarly, Apple reports that its content will teach educators "fun and meaningful ways to bring these [media] skills into any lesson, at any grade level" (Apple, 2020). In fact, the corporate educator content often reads like a sales pitch, with minimal if any evidence to back up central claims. For example, Verizon tries to persuade schools to adopt their content as a way to "modernize" their "aging infrastructure to embrace digital classroom and mobile learning transformation" (Verizon, 2020). However, it is

unclear what ‘modernize’ means. Nor does it explain how or why their curriculum is more effective at fostering the schools’ desired learning outcomes. This is similar to the defense of the late-20th century, when companies argued that the ‘supplemental’ work would ‘enhance’ the work being done in the classroom (Molnar, 1996). Likewise, Verizon emphasizes that its approach will reduce costs for schools because their “digital technology solutions for schools help control costs and keep school networks and data secure” (Verizon, 2020). This reflects the 20th-century emphasis on long-term contracts that enabled corporations to insinuate themselves into schools and classrooms, thereby shoring up future income (Stead, 1997). However, a cost-benefit analysis remains missing. What is clear is that corporations’ primary goal is normalize neoliberal ideologies by digitizing students’ offline behaviors and attitudes. In addition to their desired learning outcomes of marketable skills, the corporate content seeks to foster students understanding and engagement with digital communities.

Finding 2: Civil Digital Communities

One of the learning objectives in much of the corporate curricula is to teach students how to seize the opportunity for ‘connectivity’ on corporate platforms to create a digital ‘community’ where they can ‘communicate’ and ‘collaborate.’ One of the roles of media literacy educators, according to the corporate content, is to teach, define, and promote notions of ‘civility’ and ‘citizenship’ in this digital space. However, the definition of many of the commonly used terms (connectivity; community; communication; collaboration; civility; citizenship) in the corporate curricula remain nebulous.

One of the learning objectives in some of the corporate curricula is to foster community engagement through a collaborative form of digital communication. Multiple communities are discussed throughout the curricula, from the “global information and communication community” discussed by Twitter (p.20) to Verizon’s treatment of “school districts” as communities (Verizon, 2020). Regardless of the community in focus, the corporate content seeks to have members of that community communicate and collaborate on their company’s platform and tools. For example, Verizon argues that its approach improves collaboration among teachers and staff in the school district by enabling “teachers, parents and staff to communicate and collaborate more easily in digital and mobile environments” (Verizon, 2020). Microsoft, too, emphasizes more effective collaboration as a learning goal of using their platforms and software. The company argues that use of their OneDrive and Outlook platforms with their Word software promotes effective communication and collaboration. Similarly, Apple reports that its tools promote collaboration by inspiring students’ “creative expression” as they “develop and communicate ideas through video, photography, music, and drawing” (Apple, 2020). Finally, Facebook argues that its platform and educator content promote “community engagement” by having students learn to verify information, build online advocacy campaigns, and look to popular culture references as a way to “make change” (Facebook, 2020).

One of the related learning goals found in most of the corporate content is to have students engage with digital platforms in a ‘civil’ manner that exudes ‘citizenship.’ For example, Microsoft centralizes civility in its curriculum about online responsibility. What these corporations mean by ‘civility’ is murky. For example, Facebook’s educator content advocates that civility can be achieved by having students “explore qualities that constitute healthy and kind relationships and promote upstanding” (Facebook, 2020). Google’s curriculum also encourages students to rely on dialogue as a way to promote civility (Google, 2019). Civility is often linked to the desired learning outcome of digital citizenship. The only attempt to clearly

define the term comes in Google’s “Internet Code of Awesome,” which asks students to “share with care (be internet smart); don’t fall for fake (be internet alert); secure your secrets (be internet strong); it’s cool to be kind (be internet kind); [and] when in doubt, talk it out (be internet brave)” (Google, 2019). Nearpod argues that the purpose of digital citizenship is to “Empower students to use technology safely and effectively” (Nearpod, 2020), which for Nearpod means “to think critically and participate responsibly in the digital world” (Nearpod, 2020). Their idea of citizenship reflects the neoliberal ideology of individualism and barely communal or social, not at all systemic or structural. Despite the positivist language concerning these outcomes, the corporate educator content does discuss, although it is limited, some of the dangers associated with the use of digital tools and the internet.

Finding 3: Protecting Students From Harm

These companies assert that their curricula seek to help students protect themselves from the dangers and threats posed by media use. They are unanimous in opposition to the dangers and threats posed by cyber-bullying, false information, scams, and fraud. This cleaves with the notion that corporations can reduce or eliminate negative corporate image by getting involved in schools (Harty, 1979; Molnar, 1996). In the age of supposed ‘fake news’ and a time when it is frighteningly easy to manipulate digital data (Higdon, 2020), these corporations can redeem their public image through the visage of civic responsibility. However, their commitment to privacy is difficult to discern due to the complexities of privacy and surveillance in the 21st century, along with the specific roles these companies play. All of the corporations analyzed herein regularly engage in some form of data mining and analysis.

The corporate content almost universally seeks to mitigate students’ susceptibility to online scams, fraud, and false information. The notable exceptions include Apple and Intel, who avoid these subjects completely. The other corporate content seeks to teach students how to avoid or spot online scams, fraud, and false information before they become a problem. For example, much of Google’s content emphasizes the importance of teaching students how to avoid falling for fake content online (Google, 2019). Microsoft also seeks to teach users about “online scams” and the “best practices for more safely sharing information online” (Microsoft, 2020). The lessons are based on the notion that students can protect themselves by checking the validity of the content in question. However, other than offering definitions of terms such as scam and phishing, the content does not teach students how check the validity or bias of content. For example, Google asks students to consider whether or not the content in question looks “suspicious,” but what suspicious means or how to spot it is ambiguous (Google, 2019).

The corporate content that mentions bullying—all the programs except those produced by Apple, Verizon, and Intel—displays a universal commitment to teaching students how to combat cyberbullying. Google defines cyberbullying as “bullying that happens online or through using digital devices” (Google, 2019). They offer content that helps students identify a situation as cyber-bullying. They argue that building “healthy relationships” is one way to combat cyberbullying, but how they define *healthy* remains ambiguous (Google, 2019). Microsoft’s content focuses on addressing the bully, arguing that we can avoid becoming bullies if we “live by the golden rule;” “avoid sending negative messages;” “respect differences;” “pause before replying;” “think twice before sharing online” (Microsoft, 2020). Twitter explains the dangers posed by cyberbullying to students, but also provides educators with warning signs that their student is a victim of cyberbullying. The signs that a student is upset are limited to “visibly angry, or upset” when cyber-bullying is discussed (Twitter, 2020). If educators observe such an impact, Twitter’s

curriculum requests that educators make sure the student is safe, investigate the incident, and if necessary report it to the school or community authorities.

Some of the cyber-bullying lessons reveal the corporate platform's conflicting position on privacy: The corporate content promotes community surveillance and appealing to the platform as an authority, but Google encourages students to be "upstanders," people who intervene to stop pernicious practices such as cyberbullying (Google, 2019). There is a collaboration component as well that encourages users to organize a "bunch of friends to create a "pile-on of kindness – post lots of kind comments about the person being targeted (but nothing mean about the aggressor, because you're setting an example, not retaliating)" (Google, 2019). In addition to motivating students to monitor communication and to take action, the corporate content encourages students to report bullying and content that makes them feel "uncomfortable" to the platform provider (Google, 2019). These policies reflect the neoliberal ideology that treats the corporate platform as trusted authority on issues involving uncomfortable content.

Paradoxically, the very same content that champions the surveillance of users, either by other users or by the corporate platform itself, seeks to teach students how to protect their privacy. Nearly every company notes the threats to privacy posed by using digital technologies and platforms. Some of the content discusses the concept of a digital footprint to varying degrees and instructs students to protect their privacy, which Samsung refers to as "mobile security," through the use of "strong password design" and "recognizing phishing" (Pierce, March 14, 2016). Although most of the corporations discuss why users may want to keep their information private, it is limited to concerns over the exposure of personal information to other users and identity and password theft.

Indeed, when it comes to privacy, students are encouraged to consider the threat posed by other users, but not that presented by the corporate platform. Google's discussion of privacy is bountiful in terms of definition, but limited in its explanation of real world examples, especially its company's complicity in selling user information to third parties. The Google handbook defines privacy and digital footprint, noting that users should be aware of threats to their privacy because "like everything else on the Internet, your digital footprint could be seen by people you've never met" (Google, 2019). However, the use of vague terms like "people," or Facebook's "how can you manage who sees what you share," obfuscates how the tech companies and third parties can and do access that data. It is ironic that Google and Facebook warn young users to be wary of digital strangers given that most if not all of their respective staff accessing user data are strangers to these users. Without discussion of the corporate threat to privacy, there is no discussion about what third parties do with that data, nor any analysis of if or why users may be concerned. For example, Microsoft mentions that users have a digital footprint but neglects to mention its participation in the surveillance capitalist practice of collecting and exchanging user data with third parties. Meanwhile, Intel and Verizon ignore the issue of privacy and data-sharing altogether. Only Twitter's content, made through collaboration with UNESCO, offers a well-rounded picture of the threats to user privacy posed by both individuals and platforms: "data can be collected by Internet services for various uses," including content that reflects users' interests or "for commercial purposes to serve advertorial content" (Twitter, 2020, p.10). However, they stop short of including themselves by name. Like the actors who threaten privacy, the corporate content offers a narrow scope of the diversity of users.

Finding 4: Some Differences Among Users Matter

Users are largely treated as a monolith in all the course content. Despite the litany of studies on media effects, the user differences expressed in the curricula were largely reduced to age, region, and ideology. Facebook and Twitter offered the most robust explorations of user identity, but they still fell short of arguing the crucial dynamic that identity plays in media messaging.

The various ways in which different users approach and interpret media goes nearly unmentioned in the content. One exception is Facebook, which notes that there are different “perspectives” for every user (Facebook, 2020). As a result, Facebook’s curriculum asks students to consider “how you present yourself online and how others may perceive you in different ways depending on their perspective” (Facebook, 2020). However, they narrowly define these perspectives: In one exercise, Facebook’s content claims that students “will gain awareness of the relevant contextual factors (e.g., time, cultural, social, local/regional/global) that impact one’s online presence. Additionally, participants will consider the implications of the information they put online on their relationships with family, friends, and authority figures (e.g., teachers, employers)” (Facebook, 2020). Facebook’s approach is noteworthy because it puts pressure on the user, rather than on the structure of the system being used. Facebook’s delineation of identities is also noteworthy because it leaves the identities of race, class, gender, and sexuality unmentioned.

Twitter’s content was an outlier in that it offered a much more robust introduction to the different identities that inform media use. Twitter noted that differing identities of users include “race, ethnicity, national origin, sexual orientation, gender, gender identity, religious affiliation, age, disability, or serious disease” (Twitter, 2020, p. 33). They argue that a “crucial part of MIL [Media Information Literacy] is to enable people to critically evaluate how the media and technological platforms assert power, enable a diversity of voices and self-expression” (Twitter, 2020). However, while Twitter notes they seek to prevent “hate” for these identities from being expressed on its platform, it stops short of explaining why it chose these identities as opposed to others (Twitter, 2020, p. 33). Furthermore, Twitter puts the responsibility on the user to find someone such as “teacher, another trusted adult, or a parent” to confide in about their encounters with hateful content so they determine “appropriate response in line with your school’s policy on bullying” (p. 9).

Discussion and Conclusion

Our research indicates that 21st century digital corporations view classroom spaces much in the same way as their 20th century predecessors. Our findings reveal that 21st-century corporate media literacy content represents another epoch in corporations’ continued effort to shape labor markets, cultivate a loyal consumer base, and maintain their image through the classroom. This is illuminated by the assumptions about media use embedded in the corporate curricula: it is all digital, online, and web-based. The curricula never introduces or analyzes the notion that a reduction or full elimination of media use should be considered a viable solution to the problems posed with media use. This speaks to Singer and Maheshwari’s (2018) contention that what is left out of the curricula is as important as what is included. Indeed, our findings strengthen this point. For example, when it comes to privacy, there is minimal to no discussion or dissection of data mining and surveillance capitalism. Furthermore, inviting a corporation into the classroom (or, at least not actively resisting their entry) subjects students to neoliberal ideology often through what amounts to advertising as *part of* their education, and potentially limits the autonomy of teachers, classrooms, and schools. Inviting corporations into classrooms acts in opposition to the belief that public schools should be free of corporate influence. And yet this is

hardly a new phenomenon. Since at least the 1920s, corporations have plied their wares, sought out potential future employees, and repaired their public image by providing ‘free’ material to students and teachers in need.

The questions raised by our research are particularly important given the complexities of surveillance capitalism. Many of the questions regarding corporate content in the classroom are still being decided by educators: Who sets the terms? Who determines the methods? As of now, it appears that the content and pedagogy are wholly dictated by the corporations, but educators can determine whether or not to include it their classroom. Furthermore, educators can decide if the content is examined through a critical lens or introduced as objective pedagogy. Many of these decisions are shaped on how effectively corporations advertise their content to educators. In this regard, practitioners’ resistance to techno-utopian notions of education will be challenged by surveillance capitalism’s efforts to not only nudge, but direct human behavior (Zuboff, 2019). Throughout the late 20th century, educational materials would appear, unsolicited, in teachers’ mail; these days, they appear, unsolicited, via digital means such as email inboxes. Who’s to say that these same corporations might not utilize algorithmic data analysis to nudge or direct educators to adopt 21st century corporate digital educational content without proper considerations?

The quickness with which education was moved into digital spaces during COVID-19 left little time to assess the educational affordances and problems of corporate digital education content. Furthermore, it also left little time for educators – who had avoided or rarely considered digital content previously – to determine if they were conflating digital with effective in regards to distance education. Our research indicates a need for educational institutions and practitioners to investigate and interrogate learning goals as they relate to the promise and reality of digital assessment tools. In this investigation, they should consider the narrow set of goals and ideologies expressed in corporate media literacy content.

Our findings beg for future research on the *why* behind the corporate curricula design. It is not enough to know what it is in and missing from the curricula: Researchers need to identify the reason for those decisions. For example, researchers need to explore why the corporate content designers, especially at Google, saw the element of violence, such as throwing kindness at people to make them happy and the yelling at/locking up bullies in cages, as an effective way to teach media literacy. Given the recent scholarship about historical levels of inequality and the wave of protests and issues surrounding #Me Too and #BlackLivesMatter, there needs to be more research on why these companies present perspectives as being shaped by “time, cultural, social, and local/regional/global,” while ignoring the “power” that is expressed in gender, race, sexuality, ability, and class (Facebook, 2020). Future research is also needed to explore how this material is taught in the classroom. Teachers have a unique opportunity to decide if and how corporate media literacy content enters the classroom. Scholars need to examine how educators approach select areas such as community, civics, and privacy in the classroom with corporate content versus non-corporate content. Similarly, there must be research into how effective these curricula are at achieving their stated goals, including comparison of the outcomes with schools’ stated media literacy outcomes. Relatedly, our findings raise questions about the impact, if any, of external validation/element of legitimacy as it relates to the certificates upon completion.

Bibliography

- Apple. 2020. *Everyone can create*. Apple. Accessed June 17, 2020.
<https://www.apple.com/education/k12/everyone-can-create/>
- Apple unveils Everyone Can Create curriculum to spark student creativity. March 27, 2018.
 Apple. Accessed May 28, 2020. apple.com/newsroom/2018/03/apple-unveils-everyone-can-create-curriculum-to-spark-student-creativity/.
- Apps that help you put the power of technology to work. In and out of class. ND. Apple.
 Accessed May 28, 2020. apple.com/education/k12/teaching-tools/.
- Aufderheide, Patricia. 1993. *Media literacy—A report of the National Leadership Conference on media literacy*. Queenstown, MD: The Aspen Institute.
- boyd, danah. 2012. Privacy and security The politics of real names. *Communications of the ACM*, 55(8), 29-31.
- Buckingham, David. 1998. Media education in the UK: Moving beyond protectionism. *Journal of Communication* 48(1), pp. 33-43. DOI: <https://doi.org/10.1111/j.1460-2466.1998.tb02735.x>.
- Buckingham, David. 2000. *The making of citizens: Young people, news and politics*. London, England: Routledge.
- Buckingham, David. 2003. *Education, entertainment and learning in the home*. Buckingham, England: Open University Press.
- Buckingham, David. 2011. *The material child: Growing up in consumer culture*. Cambridge, England: Polity Press.
- Bulger, Monica, and Patrick Davison 2018. The promises, challenges, and futures of media literacy. *Journal of Media Literacy Education*, 10(1), 1-21.
<https://doi.org/10.23860/JMLE-2018-101-1>.
- Butler, Allison. 2020. *Educating media literacy: The need for critical media literacy in teacher education*. Netherlands: Brill-Sense Publishers.
- Cheung, Chi-Kim. 2009. Media education across four Asian societies: Issues and themes. *International Review of Education*, 55, 39-58.
- Consumers Union's Education Services Division. January 1, 1998a. Captive kids: A report on commercial pressures on kids at schools. Consumer Reports. Accessed June 1, 2020.
advocacy.consumerreports.org/press_release/captive-kids-a-report-on-commercial-p pressures-on-kids-at-schools-part-one/.
- Consumers Union's Education Services Division. January 1, 1998b. Selling America's kids: Commercial pressures on kids of the 90s. Consumer Reports. Accessed June 1, 2020.
advocacy.consumerreports.org/press_release/selling-americas-kids-commercial-p pressures-on-kids-of-the-90s-part-one/.
- Cope, Bill and Kalantzis, Mary. April-June 2016. Big data comes to school: Implications for learning, assessment, and research. *AERA*, 2(2), 1-19. DOI: 10.1177/2332858416641907.
- Druick, Zoe. 2016. The myth of media literacy. *International Journal of Communication*, 10 (20), 1125–1144.
- Facebook. 2020. *Digital literacy library*. Facebook. Accessed June 17, 2020.
<https://www.facebook.com/safety/educators>.
- Forbes. (nd). Top 100 Digital Companies. Forbes.com. Accessed June 17, 2020.
<https://www.forbes.com/top-digital-companies/list/#tab:rank>.

- Gambuto, Julio Vincent. April 10, 2020. Prepare for the ultimate gaslighting. *Medium*. Accessed April 14, 2020. forge.medium.com/prepare-for-the-ultimate-gaslighting-6a8ce3f0a0e0.
- Google. 2019. *Be internet awesome*. Google. Accessed June 17, 2020. https://storage.googleapis.com/gweb-interland.appspot.com/en_us/hub/pdfs/Google_BeInternetAwesome_DigitalCitizenshipSafety_2019Curriculum.pdf.
- Harty, Sheila. 1979. *Hucksters in the classroom: A review of industry propaganda in schools*. Washington, D.C.: Center for Responsive Law.
- Heins, Majorie, and Christina Cho. *Media literacy: An alternative to censorship*. New York, New York: Free Expression Project.
- Higdon, Nolan. 2020. *The anatomy of fake news*. Oakland, California: University of California Press.
- Higdon, Nolan, Allison Butler, & J.D. Swerzenski. (2021). "Curricular similarities and differences between critical and acritical media literacy: Supporting teachers' classroom inclusion," *Democratic Communicate*, 2021. (Accepted)
- Hobbs, Renee, and Richard Frost. (2003). Measuring the acquisition of media-literacy skills. *Reading research quarterly*, 38(3), 330-355, DOI: 10.1598/RRQ.38.3.2.
- Intel. 2020. *Intel education: The journey inside*. Intel. Accessed June 17, 2020. <https://www.intel.com/content/www/us/en/education/k12/the-journey-inside.html>.
- Jain, Priyanka. 2016. Social media addiction and its manifold consequences on younger generations. *International Journal on Transformations of Media, Journalism & Mass Communication* (Online ISSN: 2581-3439), 1(1), 38-45
- Jhally, Sut and Earp, Jeremy. 2003. Empowering literacy: Media education as a democratic imperative. A report commissioned by the Ford Foundation. Accessed July 16, 2019. mclab2014.files.wordpress.com.
- Jolls, Tessa. March 10, 2011. Voices of media literacy: International pioneers speak. Center for Media Literacy. cml.org.
- Kellner, Douglas and Share, Jeff. 2005. Toward critical media literacy: Core concepts, debates, organizations, and policy. *Discourse: Studies in the cultural politics of education*, 26(3), 369-386.
- Kellner, Douglas and Share, Jeff. 2007. Critical media literacy: Crucial policy choices for a twenty-first-century democracy. *Policy Futures in Education*, 5(1), 59-69. DOI: <https://doi.org/10.2304/pfie.2007.5.1.59>
- Littler, Jo. 2013. Meritocracy as plutocracy: The marketising of 'Equality' under neoliberalism. *New Formations*, 80(80), 52-72.
- Microsoft. 2020. *Microsoft digital literacy course*. Microsoft. Accessed June 17, 2020. <https://www.microsoft.com/en-us/digitalliteracy/home>.
- Mirowski, Philip and Plehwe, Dieter. 2009. *The Road From Mont Pèlerin: The Making Of The Neoliberal Thought Collective*. Harvard University Press.
- Molnar, Alex. 1996. *Giving kids the business: The commercialization of America's schools*. Boulder, CO: Westview Press.
- Molnar, Alex. 2005. *School commercialism: From democratic ideal to market commodity*. New York, NY: Taylor & Francis.
- Mull, Amanda. April 23, 2020. Pandemic advertising got weird fast. *The Atlantic*. Accessed May 2, 2020. theatlantic.com/health/archive/2020/04/how-advertise-pandemic/610456/.

- Nader, Ralph. 2000. 'Children: Toward their civic skills and civic involvement.' In *The Ralph Nader reader*, 319-324. New York, NY: Seven Stories Press.
- NAMLE. 2019. *Corporate Partners*, NAMLE. Accessed June 17, 2020. Avail: namle.net/corporate-partners.
- Nasir, Na'ilah Suad, Scott, Janelle, Trujillo, Tina, and Hernandez, Laura. 2016. "The sociopolitical context of teaching", in Gitomoer, Drew. and Bell, Courtney. (Eds), *Handbook of Research on Teaching*, American Educational Research Association, Washington, DC, pp. 349-390
- Nearpod. 2020. *Digital citizenship - Empower students to use technology safely and effectively*. Nearpod. Accessed June 17, 2020. <https://nearpod.com/digital-citizenship>.
- Perez, Sarah. June 24, 2019. Google's new media literacy program teaches kids how to spot disinformation and fake news. *Tech Crunch*. Accessed May 28, 2020. techcrunch.com/2019/06/24/googles-new-media-literacy-program-teaches-kids-how-to-spot-disinformation-and-fake-news/.
- Pierce, Dennis. March 14, 2016. Infusing a Digital Literacy Curriculum Into the Classroom. *Samsung*. <https://insights.samsung.com/2016/03/14/infusing-a-digital-literacy-curriculum-into-the-classroom/>
- Piketty, Thomas. 2020. *Capital and Ideology*. Cambridge, Massachusetts: The Belknap Press Of Harvard University Press.
- Polygram Records. January 7, 1986. Polygram Records and Lifetime Learning Systems spark "RUSH to creativity." 2112.net. Accessed June 8, 2020. 2112.net/powerwindows/transcripts/19860107/polygram.htm.
- Potter, W. James. 2010. The state of media literacy. *Journal of Broadcasting & Electronic Media*, 54(4), 675-696. DOI: <https://doi.org/10.1080/08838151.2011.521462>.
- Reynolds, Laurence, and Szerszynski, Bronislaw. 2012. "Neoliberalism and technology: Perpetual innovation or perpetual crisis?" In: Luigi Pellizoni and Marji Ylonen (eds) *Neoliberalism and Technoscience: Critical Assessments*. Farnham: Ashgate Publishing, pp. 27-46.
- Saltman, Kenneth J. 2016. Corporate schooling meets corporate media: Standards, testing, and technophilia. *Review of Education, Pedagogy, and Cultural Studies*, 38(2), 105-123. DOI: 10.1080/10714413.2016.1155953.
- Stead, Deborah. January 5, 1997. Corporate classrooms and commercialism. *The New York Times*. Accessed May 28, 2020. nytimes.com/1997/01/05/education/corporate-classrooms-and-commercialism.html.
- Singer, Natasha. and Maheshwari, Sapna. (October 23, 2018). Google is teaching children how to act online. Is it the best role model? *The New York Times*. Accessed October 23, 2018. Avail: <https://www.nytimes.com/2018/10/23/business/google-kids-online-safety.html>
- Twitter and UNESCO. 2020. *Teaching and learning with Twitter*. The United Nations Educational, Scientific and Cultural Organization. Accessed June 17, 2020. https://en.unesco.org/sites/default/files/gmw2019_twitter_mil_guide.pdf
- Verizon. 2020. *Verizon innovative learning is getting more students ready for tomorrow*. Verizon. Accessed June 17, 2020. <https://www.verizon.com/build-the-future/learn/education/verizon-innovativelearning-stem/>.
- Yousman, William. 2016. Who's afraid of critical media literacy? In Huff, Mickey & Roth, Andy Lee (Eds.). *Censored 2017*, pp.369-416. New York, NY: Seven Stories Press.

- Wheatley, Karl F. 2018. Student Achievement, Marketable Job Skills, and Global Competitiveness: America's Unhealthy Education Priorities. *International Journal of Learning, Teaching and Educational Research*, 17(6), 51-67.
- Williamson, Ben. 2017. *Big data in education: The digital future of learning, policy and practice*. London, England: Sage Publications.
- Zuboff, Shoshana. 2019. *The Age Of Surveillance Capitalism: The Fight For The Future At The New Frontier Of Power*. New York, New York: Profile Books.